

A Focused Exploratory Study on Understanding the Role of Healthcare Quality Professionals in the Middle East

Shaik Mohiuddin

Quality Division, AL Dhafra Hospitals, SEHA Group, Abu Dhabi, UAE. E-mail: shaikden001@gmail.com

ARTICLE INFO	ABSTRACT
<p>Article type: Original Article</p>	<p>Introduction: Healthcare quality personnel have contributed to and prepared organizations to meet various quality and safety challenges. With extensive roles, clarity of their work and responsibilities is needed. However, their role still needs to be clarified. This focused study aimed to explore the scope of quality personnel within the Middle East through a representative group of professionals in the "Gulf Corporation Council (GCC) Quality Professionals Forum.</p>
<p>Article History: Received: 21 May 2024 Accepted: 30 Jun 2024</p>	<p>Materials and Methods: Following the literature review, a suitable questionnaire was identified using the National Association for Healthcare Quality (NAHQ) domains for the group survey. The survey was conducted on April 5, 2022, at a workshop. In addition, the participants were discussed to clarify the roles and responsibilities of quality professionals.</p>
<p>Keywords: Job description, Quality assurance, Personnel management, Population health. Total quality management.</p>	<p>Results: The findings of this study are significant, revealing that patient safety and health data analytics are the top two areas within the scope of quality personnel, with scores of 90% and 83.3%, respectively. In contrast, involvement in population health (40%) and influencing culture (56.2%) were considered the least involved areas. The results provide insights for optimizing workforce competencies and enhancing healthcare contributions.</p>
	<p>Conclusion: The study has identified varying job responsibilities for quality professionals in the region, highlighting the minimal emphasis on public health. It underscores the necessity for collaborative efforts among all stakeholders to establish standardized guidelines for the scope of practice for quality personnel. Further investigation and extension of this study to a larger sample size is required, especially in the Middle East region, to assess the subject in more noteworthy profundity.</p>
<p>► Please cite this paper as: Mohiuddin Sh. A Focused Exploratory Study on Understanding the Role of Healthcare Quality Professionals in the Middle East. <i>Journal of Patient Safety and Quality Improvement</i>. 2024; 12(2):73-80. Doi: 10.22038/PSJ.2024.80008.1431</p>	

Introduction

Every profession needs up-to-date skills and competencies to face volatile, uncertain, complex, and ambiguous (VUCA) conditions and challenges (1). Globally, and specifically in the Middle East (also referred to interchangeably as GCC), the role of healthcare quality professionals needs to be defined (2). AHRQ defines a healthcare quality professional as an individual who specializes in ensuring and improving the quality of healthcare services provided to patients (3). These personnel are dedicated to enhancing patient outcomes, safety, and satisfaction by implementing quality improvement initiatives, monitoring performance metrics, and adhering to established standards and best practices in healthcare delivery. They work across various healthcare settings, including hospitals, clinics, managed care organizations, and public health agencies.

The perception of their role varies widely, largely dependent on the professional's strengths, the organization's leadership, governance structure, and, to some extent, the regulator's expectations. Evidence in the literature regarding healthcare quality professionals' roles in Middle Eastern healthcare organizations is scant. Similarly, little research exists on the role of quality management professionals in the region (4). Globally, significant work in understanding and defining the roles and competencies of quality professionals in health care is conducted by the National Association of Healthcare Quality (NAHQ), USA, through their competency framework (5). The literature search strongly supports the contention that the roles vary significantly among geographies and economies, including within the Middle East, and range from a narrowed scope focusing on accreditations and regulatory compliance to a broader scope.

In essence, "quality is everyone's responsibility" for healthcare, but this claim is debated by some researchers, particularly as it undermines the problems related to its implementation (6,7). Moreover, this is still a distant dream; even with explicit recognition of the importance of the positive impact of knowledge of quality improvement (QI) methodologies in medical

and nursing education, there are significant barriers to implementing appropriate educational strategies among these professionals (8,9). No standardized job expectations, scope of practice, roles, and responsibilities are available for healthcare-quality personnel. Hence, this study highlights this gap and urges policymakers and quality and safety organizations to standardize the scope of practice and deliverables for healthcare quality personnel.

We strongly believe that the current healthcare environment, including the scenario described above, strengthens the contention that quality professionals should have a well-defined role encompassing a broader portfolio, impacting strategy operational decision-making, including cost, quality, and patient safety outcomes. Several opportunities exist in healthcare, where quality personnel's abilities, such as analytical, project management, and performance improvement skills, can be exploited to facilitate organizational growth and sustainability strategies; the proper use of such skills is mainly dependent on the organizational leadership and policy guidance by policymakers (10,11).

Materials and Methods

This study implemented a search strategy using PubMed and Google Scholar databases between 2000 and 2022 using keywords "roles and responsibilities," "quality management professionals," "healthcare," "quality department," and organizations, which generated around 2700 results. The author critically analyzed the most relevant articles describing the role of quality managers in the organization and relied on "recommended articles" and "similar articles" to further refine our literature search. Few articles focused on the role and scope of healthcare quality personnel. However, papers have yet to be published on the scope of quality professionals in the GCC. Based on the search results, the authors concluded that the NAHQ's competency framework, comprising eight domains, 29 competency statements, and 486 skills statements, served as a baseline for evaluating the role of healthcare quality

professionals in Middle Eastern geographies (5). The author planned to develop and execute a comprehensive, structured survey to achieve their goals but decided to begin with detailed individual interviews to evaluate comprehensively such a new area of exploration (12). The authors utilized a workshop titled "Old Lanes New Thoughts," which was presented by the author at the GCC Quality Professionals Group, to solicit feedback through open discussions and a post-workshop questionnaire based on NAHQ's eight domains. The GCC group comprises approximately 130 healthcare-quality professionals from Middle Eastern countries, including the UAE, Saudi Arabia, Qatar, Bahrain, Oman, and Kuwait, providing a good representative sample for surveying

the quality professionals working in the GCC region. Participants were informed that the survey results would be used for future research studies, and their permissions were sought through the questionnaire. Participants who chose "not willing to share data" were excluded from this study. Among the 30 members who participated and permitted the data for research, 12 members (40%) were in the top management roles (chief quality officer (CQO), head of quality, director of quality, etc.) in their organizations. Another 12 members (40%) were in middle management roles (manager, asset manager, Sr. Manager), whereas six (20%) worked as officers (quality officer, quality associate, and quality executive) (Figure 1- Respondent classification).

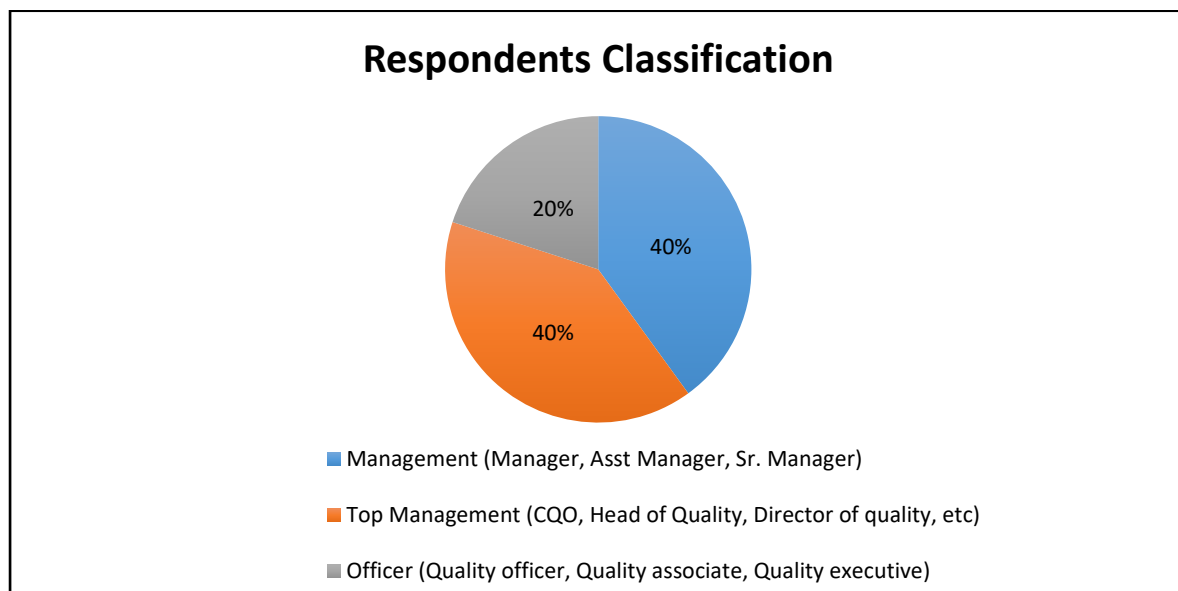


Fig 1: Respondents classification

Results

The current study surveyed a sample size of 30 respondents for eight questions, generating 239 responses. Apparent differences exist between the officer-level scope of work and the mid-management or top-management levels. The scope of work among mid-level managers and top management quality professionals was similar.

The following areas - using statistical data analysis and tools for quality improvement, implementing performance and process improvement tools and project management, promoting a safe culture,

improving processes to detect, mitigate, and prevent harm, and integrating population health strategies in quality improvement - demonstrate greater consistency and are part of the role description for quality professionals. On the other hand, professionals are less involved in areas such as applying holistic improvement methodologies, directing and monitoring the effectiveness of the quality system, and creating a continuous improvement culture and infrastructure. The inquiry into the Patient Safety domain, specifically "promoting a safe culture, enhancing processes for detecting, mitigating, and

preventing harm," received the highest number of mentions among the participants, achieving a 90% score. Conversely, the

population health and care integration domain received the lowest score (Table 1: Questions and Scoring).

Table 1. Questions and scoring

NAHQ Domain	Question (scope)	Scored above 9 (%)	Scored 5-8 (%)	Scored 4 and below (%)
Regulatory and accreditation	Question 1 Quality Audits/ accreditation and regulatory audits	76	20	3.33
Quality Integration and Leadership	Question 2 Directing and monitoring the effectiveness of the Quality system, creation of continuous improvement culture and infrastructure	58.62	37.93	3.45
Professional engagement	Question 3 Engage within the organization to demonstrate commitment to quality and to advance the profession	73.33	23.33	3.33
Quality Integration and Leadership	Question 4 Lead the integration of quality within the organization by teamwork, engagement and by creating learning opportunities	73.33	23.33	3.33
Performance and process Improvement	Question 5 Implement performance and process improvement tools and project management	80	16.67	3.33
Population Health and care transitions	Question 6 Integrate population health strategies in QI and apply holistic improvement methodologies	40	50	10
Health Data Analytics	Question 7 Use statistical data and tools to analyze data, integrate systems to collect, analyze data and help guide decision making to inform quality improvement	83.33	13.33	3.33
Patient Safety	Question 8 Promote safe culture, improve processes that detect, mitigate, and prevent harm	90	6.67	3.33

Noteworthy variances in responses were observed about the question on quality integration and the leadership domain. Only 58% of respondents ranked 9 and 10 for "directing and monitoring the effectiveness of the quality systems and creating a culture of continuous improvement." In contrast, "Leading the integration of quality within the organization through teamwork, engagement, and the creation of learning opportunities" received a score of 73.33% for nine and above. It was observed that professionals who were novices or advanced beginners (quality officers) recorded lower scores in most domains compared to experienced senior professionals.

Regarding Question 2, the survey results revealed that only 58% of the respondents indicated this function was within their scope. While the results were consistent with those of the NAHQ, further research on a larger scale is necessary to explore the

underlying reasons, including the relevance of organizational factors and the individual roles of respondents within the organization. Inconsistent responses were noted about Question 2: "Directing and monitoring the effectiveness of quality systems and creating a culture of continuous improvement and infrastructure." Question 6, which pertains to "integrating population health strategies in QI and applying holistic improvement methodologies," showed the lowest scores, aligning with the findings of Miltner et al. (13).

Feedback during the forum discussions: Feedback during forum discussions indicates that quality professionals' roles in the Middle East vary and depend mainly on the organization's vision, mission, and governance structure. Four major themes emerged from the workshop discussions.

1. Data analytics and coordination among various departments to help department

leaders understand the data and QI improvement methodologies are a core function of quality professionals in healthcare, which strongly relates to the health analytics domain of NAHQ (13).

2. Regarding competencies, many group members mentioned that understanding technology and being technology-intelligent are becoming more of an expectation of quality professionals. A respondent noted that quality professionals need to be data and technology astute to understand "big-data" to strengthen organizational decision-making abilities.

3. Regarding the role within the organization, a respondent mentioned that quality professionals require more excellent representation in the organizations and should be skilled to influence critical decisions for the future, which are data-driven, and this can be achieved only through the right skill and competency development.

4. A respondent's interesting viewpoint was that quality professionals are like puzzle solvers, with knowledge of data and analytics and the ability to use the proper process improvement tools; their contribution is pivotal to the organization's growth strategy.

Discussion

Middle Eastern healthcare organizations are unique, combining private and public healthcare systems. Reimbursement for healthcare services comes mainly from third-party payers regulated by healthcare regulators (14). Stringent regulatory policies have led regional institutions to adopt international standards and guidelines, like ISO (the International Organization for Standardization), and accreditation models, such as the Joint Commission International (JCI). These standards forced healthcare organizations to either have a dedicated quality department or integrate this function into their objectives and responsibilities in other departments based on size.

All stakeholders, including patients, expect to deliver safe-quality care at a lower cost and with good outcomes. Quality professionals in the Middle East are positioned to work closely with various

stakeholders to prepare organizations that meet regulatory, accreditation, governance, and stakeholder expectations. The scope of quality professionals and their expectations of healthcare organizations in Middle Eastern countries are varied, as shown in the survey results and international literature (5). Although bite-sized, this is the first study conducted in the Middle East on the scope of quality healthcare professionals and has been instrumental in understating the variance in this area. There have been no similar studies in the region that compare and contrast the study findings or benchmark the survey results. This exploratory study underscores the need for further research to explore the role of healthcare quality professionals in the current healthcare environment in the Middle East. It also presents a solid case for expanding professionals' current roles by utilizing their knowledge, abilities, and skills through meaningful contributions to delivering safer healthcare to our patients and contributing to the growing healthcare demands of the century. Creating a continuous improvement culture should be "everyone's responsibility," but it should be an essential function of the quality team (6, 15) (7). Ultimately, the organization's leadership, its CEO, and the board are responsible for creating a supportive environment for developing a culture of continuous improvement. However, quality professionals strengthen this function and greatly support organizations in achieving this infrastructure (7,16).

The study utilized a post-workshop survey of a group of GCC quality professionals attending the workshop. Below is the list of questions asked to be rated on a scale of 0–10, with 0 being outside the scope of my role and ten being very much within the scope of my role. The scores were categorized into three categories: low (1-4), medium (5-8), and high (9–10).

The below questions were framed to address the NAHQ domain.

1. Quality audit accreditation and regulatory audits
2. Directing and monitoring the effectiveness of the quality system, creating a culture of continuous improvement and infrastructure

3. Engage within the organization to demonstrate commitment to quality and to advance the profession
4. Integrating quality within the organization through teamwork, engagement, and creating learning opportunities.
5. Implement performance and process improvement tools and project management
6. Integrate population health strategies in QI and apply holistic improvement methodologies
7. Use statistical data and tools to analyze data, integrate systems to collect and analyze data, and help guide decision-making to improve quality.
8. Promote a safe culture and improve processes that detect, mitigate, and prevent harm. The question related to the patient safety domain—promoting a safe culture and improving processes that detect, mitigate, and prevent harm—was the most reported area within the scope of participants, scoring 90%. In contrast, the question that received the lowest score was related to the population health and care integration domain (Table 2: Questions and scoring). There were differences in responses related to the questions on quality integration and the leadership domain, with only 58% of respondents ranked 9 and 10 for directing and monitoring the effectiveness of quality systems and creating continuous improvement; in contrast, leading the integration of quality within the organization

by teamwork, engagement, and by creating learning opportunities, attracted only 73.33% score for nine or above.

Professionals who were novice or advanced beginners (quality officers) recorded lower scores in most domains than experienced senior professionals.

The survey results for Question 2 demonstrate that only 58% of the respondents indicated that this function is within their scope. While the results were similar to those of the NAHQ, further research at a larger scale is needed to explore the underlying reasons, including the relevance of organizational factors and respondents' roles within the organization (13). Inconsistent responses were noted for Question 2: directing and monitoring the quality systems' effectiveness and creating continuous improvement and infrastructure. Question 6: Integrating population health strategies in QI and applying holistic improvement methodologies showed the lowest scores, which conforms to the findings of Milner et al... (13)

The survey results for "directing and monitoring the effectiveness of quality systems and the creation of continuous improvement culture and infrastructure" (Figure 2, Question 2 responses) attracted varied reactions from the authors' viewpoint, compared to the scores of question 4 belonging to the same domain.

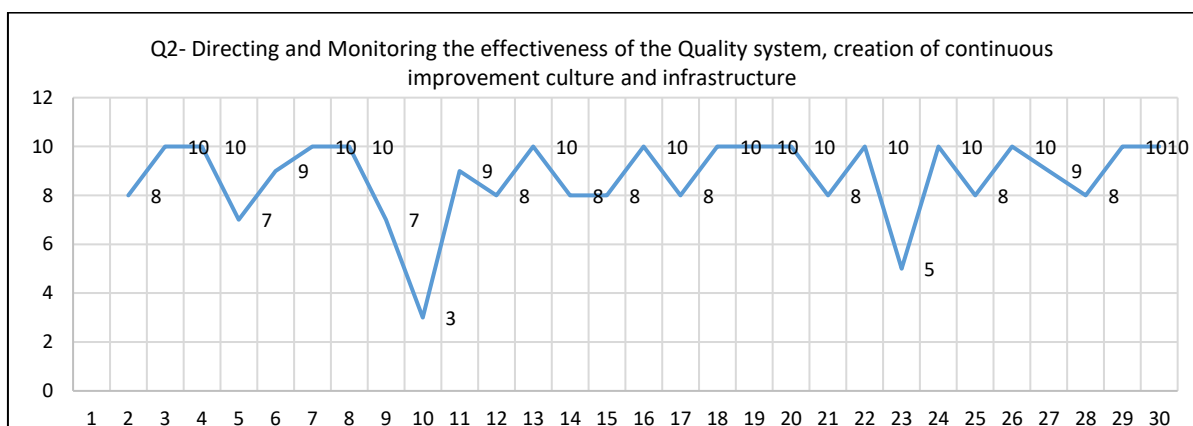


Fig 2: Question 2 responses

Question 6: Integrate population health strategies in the QI and apply holistic improvement methodologies (Figure 3- Q 6 responses). Similar to the NAHQ score, the

population health domain had the lowest score among all domains, with only 40 respondents indicating that this area was within the scope of their role (13).

Regulators and governments have recently become interested in population health (17). With the progressing trends in governments prioritizing population health in the Middle

East, this domain will attract professionals to invest more significant effort in this area, particularly in developing policies and contributing to growing research.

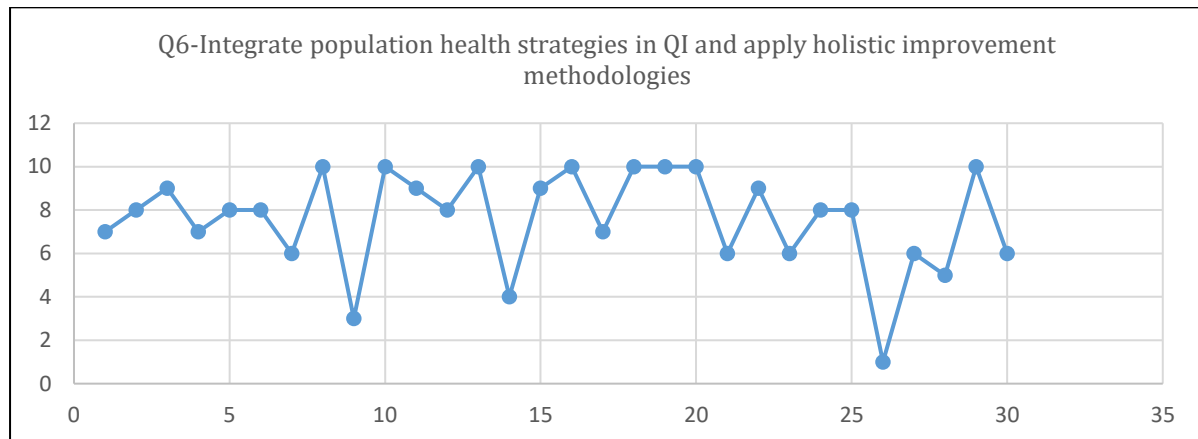


Fig 3: Question 6 responses

Our study, in a small group of GCC quality professionals, provided compelling results for further studies. This exploratory study contributes to the healthcare management and quality literature by examining the current practices in five countries in the Middle East – the Kingdom of Bahrain, the Kingdom of Saudi Arabia, the Hashemite Kingdom of Jordan, the State of Kuwait, and the United Arab Emirates – focusing on QA function in hospitals.

The evidence of the study indicates that QA efforts are perceived to contribute positively towards hospital performance and patient care.

There is a constant demand for quality professionals in healthcare systems; however, with widespread and varied scope, competency evaluation and skillset development have become challenging for quality professionals (5).

As regulators, organizational leaders, and payers focus on quality outcomes (14), there is a need to strategies quality champions in many different areas of healthcare systems, including practicing physicians and nurses, which cannot be achieved without a standardized skillset or competency framework (18).

Limitations:

The study limitation includes sample size, because of which the generalizability of results cannot be determined.

Conclusions

This bite-sized, exploratory study is thought-provoking and demonstrates the need for expanded research in the Middle East to understand the role and scope of quality personnel. Research enables professionals to develop competencies and contribute more to future healthcare quality and safety science. Defining clear roles and scope also enables quality personnel to contribute their skills to growing healthcare needs, such as population health, disaster preparedness, healthcare costs, medical errors, and unanticipated outcomes.

Technology competence, although it is not part of the NAHQ competency domains, has also emerged as an important area for quality professionals. The analytical ability to derive meaningful information to assist organizational leaders in making evidence-based decisions appeared to be the second most prominent role after patient safety, with a score of 83.3%.

The study emphasizes the importance of collaboration among policymakers, professional organizations, and healthcare providers to define the role and responsibilities of quality personnel in the healthcare sector. In conclusion, owing to the constraints of sample size, this study has merely uncovered the preliminary aspects of the topic and invites further investigation by researchers, policymakers, and providers, particularly within the Middle East region.

Acknowledgments

The author is thankful to the “GCC Healthcare Quality Professionals Group” for participating in the survey and contributing valuable discussions on the topic.

References

1. Bodenhausen G V., Peery D. Social Categorization and Stereotyping In vivo: The VUCA Challenge. *Soc Personal Psychol Compass* [Internet]. 2009 Mar 1 [cited 2022 May 5];3(2):133–51. Available from: https://www.researchgate.net/publication/227616276_Social_Categorization_and_Stereotyping_In_vivo_The_VUCA_Challenge
2. Elg M, Gremyr I, Hellström A, Witell L. The role of quality managers in contemporary organisations. <https://doi.org/10.1080/147833632011593899> [Internet]. 2011 Aug [cited 2022 May 3]; 22(8): 795–806. Available from: <https://www.tandfonline.com/doi/abs/10.1080/14783363.2011.593899>
3. NAHQ. <https://nahq.org/nahq-intelligence/competency-framework/>. Reduce Variability in Healthcare Quality Competencies.
4. Tannock J, Ahmed KS. Quality management in the Arabic-speaking countries. *Journal of Transnational Management* [Internet]. 2008 [cited 2022 May 3];13(3):174–94. Available from: <https://www.tandfonline.com/doi/abs/10.1080/15475770802400384>
5. Schrimmer K, Williams N, Mercado S, Pitts J, Polancich S. Workforce competencies for healthcare quality professionals: Leading quality-driven healthcare. *Journal for Healthcare Quality* [Internet]. 2019 Jul 1 [cited 2022 Apr 9]; 41(4): 259–65. Available from: <https://pubmed.ncbi.nlm.nih.gov/31283704/>
6. Wilson L. “Quality is everyone’s business” why this approach will not work in hospitals. *J Qual Clin Pract* [Internet]. 2000 [cited 2022 May 4];20(4):131–5. Available from: <https://pubmed.ncbi.nlm.nih.gov/11207950/>
7. Robert Lloyd. IHI. 2016 [cited 2022 May 10]. Quality is Everyone’s Responsibility. Available from: <http://www.ihf.org/communities/blogs/quality-is-everyones-responsibility>
8. Tekian A, Infante AF, Valenta AL. Master’s Programs in Patient Safety and Health Care Quality Worldwide. *J Patient Saf* [Internet]. 2021 Jan 1 [cited 2022 May 3];17(1):63–7. Available from: <https://pubmed.ncbi.nlm.nih.gov/32740135/>
9. Herman DD, Weiss CH, Thomson CC. Educational Strategies for Training in Quality Improvement and Implementation Medicine. *ATS Sch* [Internet]. 2020 Mar [cited 2022 May 3];1(1): 20–32. Available from: <https://pubmed.ncbi.nlm.nih.gov/33870266/>
10. van Leeuwen DH. The business role of healthcare quality professionals. Vol. 29, *Journal for healthcare quality : official publication of the National Association for Healthcare Quality*. 2007.
11. Elmontsri M, Almashrafi A, Banarsee R, Majeed A. Status of patient safety culture in Arab countries: a systematic review. *BMJ Open*. 2017 Feb 24;7(2):e013487.
12. Tamene FB, Sema FD, Mihiretie EA, Siyum TS, Sendekie AK. Health-related quality of life and associated factors among patients with schizophrenia at comprehensive specialised hospitals in the Northwest Ethiopia: A multicentre cross-sectional study. *BMJ Open*. 2023 Nov 15;13(11).
13. Miltner R, Pesch L, Mercado S, Dammrich T, Stafford T, Hunter J, et al. Why Competency Standardization Matters for Improvement: An Assessment of the Healthcare Quality Workforce. *J Healthc Qual* [Internet]. 2021 Sep 1 [cited 2022 May 5];43(5):263–74. Available from: https://journals.lww.com/jhqonline/Fulltext/2021/10000/Why_Competency_Standardization_Matters_for.2.aspx
14. Koornneef E, Robben P, Blair I. Progress and outcomes of health systems reform in the United Arab Emirates: A systematic review. *BMC Health Serv Res* [Internet]. 2017 Sep 20 [cited 2022 May 6];17(1):1–13. Available from: <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2597-1>
15. Foss ML, Moore SB. Evolution of quality management: integration of quality assurance functions into operations, or “quality is everyone’s responsibility.” *Transfusion (Paris)* [Internet]. 2003 Sep 1 [cited 2022 May 4];43(9):1330–6. Available from: <https://pubmed.ncbi.nlm.nih.gov/12919438/>
16. Goeschel CA, Wachter RM, Pronovost PJ. Responsibility for quality improvement and patient safety: hospital board and medical staff leadership challenges. *Chest* [Internet]. 2010 Jul 1 [cited 2022 May 5];138(1):171–8. Available from: <https://pubmed.ncbi.nlm.nih.gov/20605815/>
17. McArthur Rachel. News Article. 2021 [cited 2022 May 5]. Abu Dhabi second in the world to adopt Population Health Model | Healthcare IT News. Available from: <https://www.healthcareitnews.com/news/emea/abu-dhabi-second-world-adopt-population-health-model>
18. Oshman L, Solomonides AE, Masi C, Liederbauer V, Rao G, Ewigman B. Evolution and Evaluation of a Quality and Patient Safety Fellowship for Practicing Health Professionals. *Am J Med Qual* [Internet]. 2022 Mar 1 [cited 2022 May 4]; 37(2):118–26.